

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

R00009AT  
Revision 1  
US Helicopter, Inc.  
AH-1S  
Revised January 24, 2005

TYPE CERTIFICATE DATA SHEET NO. R00009AT

This data sheet which is a part of Type Certificate No. R00009AT prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: **This Type Certificate (TC) has been designated as ABANDONED** (See Note 11)

Type Certificate Holder Record: US Helicopter, Inc.  
P.O. Box 1088  
Ozark, Alabama 36361-1088

I. - Model AH-1S (Restricted Category) approved November 5, 1996.

Engine Lycoming T53-L-703

Fuel MIL-T-5624, Grade JP-4; alternate fuel MIL-T-5624, Grade JP-5. See FAA approved US Helicopter, Inc. Model AH-1S Rotorcraft Flight Manual USH-209S-FM-1 for substitute and emergency fuels.

<u>Engine Limits</u>	Torque Pressure	Output Shaft Speed (% R.P.M.)	Turbine Gas Temp. (°C)
Continuous Operation	0% - 88%	97% - 100%	400 <sup>0</sup> - 820 <sup>0</sup>
Transient	88% - 100% (30 min)	101.5% - 104.5% (10 sec)	820 <sup>0</sup> - 880 <sup>0</sup> (30 min) 880 <sup>0</sup> - 950 <sup>0</sup> (5 sec)

Rotor Limits

<u>Power Off</u>	<u>Power On</u>
Maximum 105%	Maximum 100%
Minimum 91%	Minimum 91%

Continuous Operation 91% - 100%

Airspeed Limits

Never exceed 160 knots up to and including 9500 lbs. G.W. at Sea Level.  
Never exceed 90 knots with weight above 9500 lbs.  
See airspeed operating limits in FAA approved US Helicopter, Inc. Model AH-1S Rotorcraft Flight Manual USH-209S-FM-1 and, for external load operations, see airspeed operating limits in FAA approved US Helicopter, Inc. Model AH-1S Rotorcraft Flight Manual Supplement U95-001-SL.

C.G. Range

Longitudinal C.G. Limits:  
(+192.4) to (+199.6) at 10,000 lbs.  
(+191.0) to (+201.0) at 8,300 lbs.  
(+190.0) to (+201.0) at 7,000 lbs. or less  
Straight line variation between points given above.

Lateral C.G. Limits:  
± 2.0 inches from centerline

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<u>Maximum Weight</u>	10,000 lbs.
<u>Minimum Crew</u>	1 (pilot)
<u>Maximum Passengers</u>	1 as mission essential crew only, per FAR 91.313 and FAR 133.35
<u>Fuel Capacity</u>	135 U.S. Gallons usable
<u>Oil Capacity</u>	2.9 gallons
<u>Rotor Blade and Control Movements</u>	For rigging information refer to Technical Manual (TM) 55-1520-236-23 with US Helicopter, Inc. Supplement U95-009-SP
<u>Serial Numbers Eligible</u>	76-22707
<u>Datum</u>	200 inches forward of main rotor centroid
<u>Leveling Means</u>	Leveling lugs from left side of storage bay compartment (laterally and Fore/Aft)
<u>Certification Basis:</u>	<p>FAR 21.25(a)(2) effective February 1, 1965, including Amendments 21-1 through 21-71.</p> <p>Type Certificate No. R00009AT issued November 5, 1996, for the special purpose of external load operations under FAR 21.25(b)(7).</p> <p>Note: In accordance with FAR 36.1(a)(4), compliance with the noise requirements was not shown. Therefore, aircraft certificated under this type certificate are only eligible for external load operations excepted by FAR 36.1(a)(4) and defined under FAR 133.1(b).</p> <p>Any alterations to the aircraft for Special Purposes not identified above require further FAA approval and in addition may require noise and/or flight testing.</p> <p>Date of application for Type Certificate: July 7, 1995</p> <p>Prior to original airworthiness certification of each rotorcraft, FAA personnel must perform a conformity inspection to the requirements of this type certificate data sheet and an airworthiness inspection to determine condition for safe operation and determine the applicant has conducted a satisfactory flight test.</p>
<u>Production Basis</u>	None. No helicopters may be produced under this approval.
<u>Equipment</u>	<p>The basic required equipment as prescribed in the following documents must be in each helicopter for certification:</p> <ol style="list-style-type: none"><li>(1) FAA approved US Helicopter, Inc. Model AH-1S Rotorcraft Flight Manual USH-209S-FM-1, dated November 5, 1996, or later FAA approved revision.</li><li>(2) Equipment as listed in US Helicopter, Inc. Drawing List U95-003-DR must be installed for external load operations.</li></ol>

- NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be in each helicopter at the time of original airworthiness certification and at all times thereafter.
- Refer to Figure 5-4 of USH-209S-FM-1 and Chapter 2 of Maintenance Manual TM55-1520-236-23 with US Helicopter, Inc. Supplement U95-009-SP for C.G. determination and use of ballast if required.
- NOTE 2. The following placards must be prominently displayed in the cockpit in full view of the pilots:
- Placard No. 1
- “THIS ROTORCRAFT MUST BE OPERATED IN ACCORDANCE WITH THE RESTRICTED CATEGORY OPERATING LIMITATIONS OF FAR 91.313.”
- Placard No. 2
- “THIS ROTORCRAFT MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE APPROVED ROTORCRAFT FLIGHT MANUAL. REFER TO US HELICOPTER, INC. USH-209S-FM-1, SECTION 1, FOR OPERATING LIMITATIONS.”
- Placard No. 3
- “OCCUPANCY LIMITED TO CREW WITH EXTERNAL LOAD, CLASS B LOADING APPROVED.”
- Placard No. 4
- “TURN THE LOAD WEIGH SYSTEM OFF WHEN NAVIGATION EQUIPMENT IN USE. NO AIRCRAFT OPERATION SHOULD BE PREDICATED ON THE READING OF THE LOAD WEIGH SYSTEM.”
- Placard No. 5
- “ELECTRONIC WEIGHING SYSTEM.”
- NOTE 3. This helicopter shall be serviced, maintained, and inspected in accordance with USH-209S-FM-1 and TM55-1520-236-23 with US Helicopter, Inc. Supplement U95-009-SP. Repairs shall be made in accordance with TM55-1520-236-23 with US Helicopter, Inc. Supplement U95-009-SP. Component overhaul intervals and replacement times shall be in accordance with the TBO/Replacement Schedule found in TM55-1520-236-23 unless superseded by an Airworthiness Directive.
- NOTE 4. EXTERNAL LOAD OPERATIONS.
- (a) External load operations shall be in accordance with FAA approved US Helicopter, Inc. Model AH-1S Rotorcraft Flight Manual Supplement (RFMS) U95-001-SL, dated November 4, 1996, or later FAA approved revision. The RFMS is required equipment for this helicopter during external load operations.
- (b) Cargo suspension system shall be installed in accordance with US Helicopter, Inc. Drawing List U95-003-DR, Revision F, dated November 1, 1996, or later FAA approved revision.
- NOTE 5. Continued Airworthiness:
- (a) FAA Airworthiness Directives for Lycoming T53-L-703 series engines must be reviewed for applicability and complied with accordingly.

(b) Maintenance Work Orders, Aviation Safety Action Messages, Technical Bulletins, Service Bulletins, and Airworthiness Directives must be reviewed for applicability and complied with accordingly.

(c) Supplemental Instructions for Continued Airworthiness, US Helicopter, Inc. Supplement U95-009-SP, must also be complied with.

NOTE 6. Modifications per US Helicopter, Inc. Drawing List U95-003-DR must be accomplished.

NOTE 7. ARMAMENT DEMILITARIZATION. All weapons systems and fire control systems, including associated electrical, hydraulic and airframe components, will be removed in accordance with US Helicopter, Inc. Documents U95-014-DR and U95-015-DR. The armament equipment outlined in Chapter 4.1 of Section II of TM55-1520-236-10 is not authorized for installation on helicopters certified under this Type Certificate.

NOTE 8. Restricted Category aircraft may not be operated in a foreign country without the express written approval of that country.

NOTE 9. This aircraft has not been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation.

NOTE 10. Engine changes are allowed provided the replacement engine is of the same make and model as identified in this type certificate data sheet. The replacement engine must have proper military records and have the applicable FAA airworthiness inspection accomplished.

NOTE 11. **This Type Certificate (TC) has been designated "ABANDONED"**. A "Notice of Intent To Designate as Abandoned Certain Type Certificates Issued in the Restricted Category," was published by the Federal Aviation Administration (FAA) in the Federal Register on August 8, 2003 (68 FR 47379). That Notice listed this TC. The FAA received no comments on the published Notice. The FAA has been unable to contact this TC holder. Hence, the FAA has determined that this TC holder is not complying with its Continued Operational Safety (COS) responsibilities. Therefore, no additional aircraft will be added to this TC and no additional original airworthiness certificates will be issued based on this TC. The effectiveness of this TC is limited to those aircraft that received original airworthiness certification prior to the incorporation of this note (Date of Incorporation, January 24, 2005). Subsequently, if the TC holder is located and assumes their COS responsibilities, the restriction(s) imposed by this note may be lifted.

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